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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/780,404 | 02/17/2004 | Tomotaka Matsuda | 0113.69646 | 1321 |
| 7590 | 08/07/2006 | | EXAMINER | |
| Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606 | | | LEWIS, CHERYL RENEA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2167 | |

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|-------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/780,404 | MATSUDA, TOMOTAKA |
| Examiner | Art Unit | |
| Cheryl Lewis | 2167 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 February 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/17/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Claims 1-10 are presented for examination.

PRIORITY

2. Applicant has complied and receives the benefit of priority of an earlier filing date under 35 U.S.C. 119(a-d) to Japanese Patent Application 2003-08912 filed March 27, 2003.

INFORMATION DISCLOSURE STATEMENT

3. The information disclosure statements filed on February 17, 2004, complies with the provisions of MPEP § 609. They have been placed in the application file, and the information referred to therein has been considered as to the merits.

DRAWINGS

4. The drawings filed on February 17, 2004 are accepted by the Examiner.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 2, 5-8, and 10 rejected under 35 U.S.C. 102(e) as being anticipated by Nonomura et al. (Pub. No. US 2005/0114763 A1 filed November 4, 2004, Foreign Priority Application JP 2001-098181 filed March 30, 2001, hereinafter Nonomura).

7. Regarding Claims 2, 5, and 10, Nonomura teaches an apparatus, method, and program for retrieving structured documents.

The method and associated system for apparatus, method, and program for retrieving structured documents as taught or suggested by Nonomura includes:

an XML documents acquiring unit that acquires a plurality of retrieval conditions (figure 1, paragraph 0103, 0114, 0148, and 0198); a documents-structure data judging unit that judges whether a plurality of documents-structure data arranged according to the tree structure in an order of appearance of elements (paragraphs 0188, 0190, 0191 and 0204-0211) in the XML documents matches with a corresponding one of the respective retrieval conditions (figure 15, paragraphs 0321, 0322, and 0341); a related character-string extractor that extracts character strings (paragraph 0114, '...access request processing device 2, retrieval request processing device 3...') in the character-string data associated with the documents-structure that is judged to match with the retrieval conditions (paragraphs 00116, 00117, 0125, and 0128); a related character-string judging unit that judges whether character string extracted by the related character-string extractor matches with a corresponding one of the retrieval conditions (figure 15, paragraphs 0321, 0322, and 0341), wherein the related character-string

judging unit judges that the character string matches with the retrieval conditions and when the documents-structure judging unit judges that the documents-structure data arranged subsequent to the documents-structure data that matches with the retrieval conditions, the related character-string extracting unit extract character-string in the character-string data associated with documents-structure data other than the documents-structure data that is judged to match with the retrieval conditions, ad the character string subjected to retrieval (paragraphs 0395-0412).

8. Regarding Claim 6, Nonomura teaches the first document-structure data and the second document-structure data include node-types that indicate kinds of nodes in the tree structure (paragraphs 0111,0112, and 0122) and link data that associates the character-string data (paragraphs 0128 and 0170).

9. Regarding Claims 7 and 8, the limitations of this claim has been noted in the rejections of claims 2, 5, and 10, presented above. It is therefore rejected as set forth above.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3, 4, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanmugasundaram et al. (Pub. No. 2004/0044959 A1 filed August 30, 2002,

hereinafter Shanmugasundaram) and Nonomura et al. (Pub. No. US 2005/0114763 A1 filed November 4, 2004, Foreign Priority Application JP 2001-098181 filed March 30, 2001, hereinafter Nonomura).

12. Regarding Claims 1, 3, and 9, Shanmugasundaram teaches a system, method, and computer program product for querying xml documents using a relational database system.

The method and associated system for querying xml documents using a relational database system as taught or suggested by Shanmugasundaram includes:

an acquiring unit that acquires an XML document (Abstract, 'A technique enabling querying of XML documents in a relational database system...', paragraph 0021, figure 1, '...FIG. 1, the technique for storing and querying XML documents...'; 'CML documents "stored" in this view are then shredded and stored as rows in these relational tables.'), wherein the XML document includes a plurality of elements that form a predetermined tree structure (paragraph 0031, 'All children of an element are represented in the same relation as the element...', paragraph 0032, '...a "ParentID" field...; 'This is to link a child element to its parent element');

an arranging unit that arranges the elements in the XML document required in a row according to the tree structure in an order of appearance in the XML document of the elements (paragraphs 0021 and 0034); an identifying unit that identifies a node-type of each of the elements arranged, wherein the node-type indicates a kind in the tree structure for each of the elements (paragraph 31, '...the child is a "*" node.', paragraph 0038); a generating unit (paragraphs 0022 and 0027, i.e. processor) that generates link

data with a node-type (paragraph 0032, 'This is to link a child element to its parent element.') identified for each of the elements arranged (paragraphs 0029 and 0030, 'Each purchase order element has two sub-elements, namely "ItemsBought" and "Payments" (line 2). Each purchase order element also has two attributes—"BuyerName" and "Date" ...').

However, Shanmugasundaram does not expressly teach an extracting unit that extracts character string data, wherein the character string data include a start tag and an end tag, the character string within the start tag and end tag in the elements.

Nonomura teaches an extracting unit (paragraph 0114, '...access request processing device 2, retrieval request processing device 3...') that extracts character string data (paragraphs 00116, 00117, 0125, and 0128), wherein the character string data include a start tag and an end tag (paragraph 0108 and 0109), the character string within the start tag and end tag in the elements (paragraph 0108 and 0109).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the XML document schema of Shanmugasundaram's method with the XML document structure of Nonomura's method because the document structure of Nonomura's method could provide a start tag and an end tag structured index to the XML document schema of Shanmugasundaram's method, wherein the start tag is defined by closing a component name by ">" and an end tag is defined by closing a component by "</" and ">", the contents of components that follows a tag are text, i.e. character string or a repetition of a child component (see Nonomura, paragraph 0108).

13. Regarding Claim 4, Shanmugasundaram teaches arranging includes placing child elements of a parent element between the parent element (paragraph 0038, '...the value "\$PurchaseOrder" so that children can refer to rows in the parent table.').

NAME OF CONTACT

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (571) 272-4113. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

(571) 273-4113 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/ Technology Center (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the
Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl Lewis
Patent Examiner
August 2, 2006